

ABSTRACT OF THE INVENTION

Novel DNA sequences derived from a family of genes encoding β -galactosidases in tomato are disclosed. β -Galactosidase II has demonstrated enzyme activity in cell wall disassembly, leading to loss of tissue integrity and fruit softening. Modification of β -galactosidase II gene expression in plants transformed for expression in the antisense direction results in improvement of the quality of fruit texture and firmness.